

FIG. 1



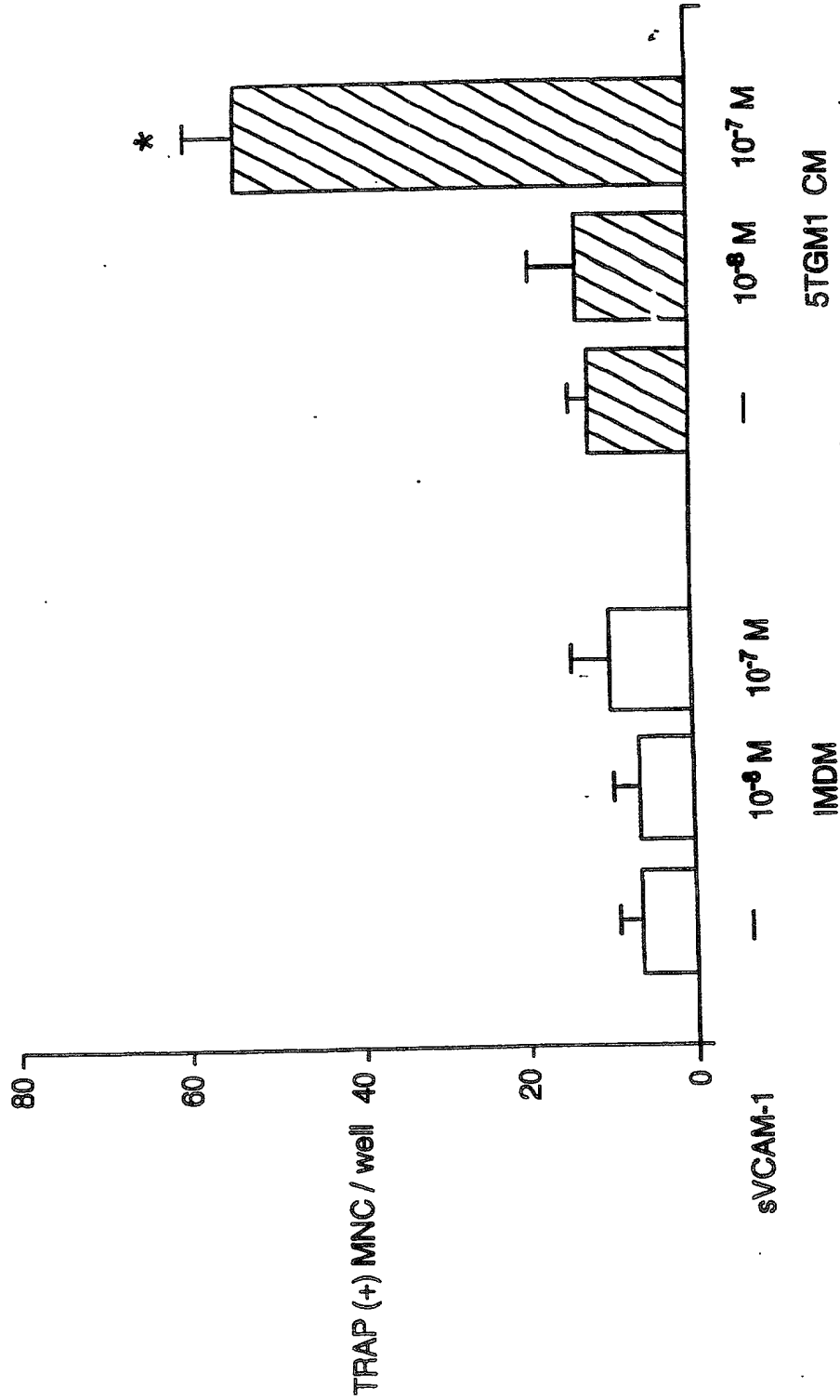


FIG. 3

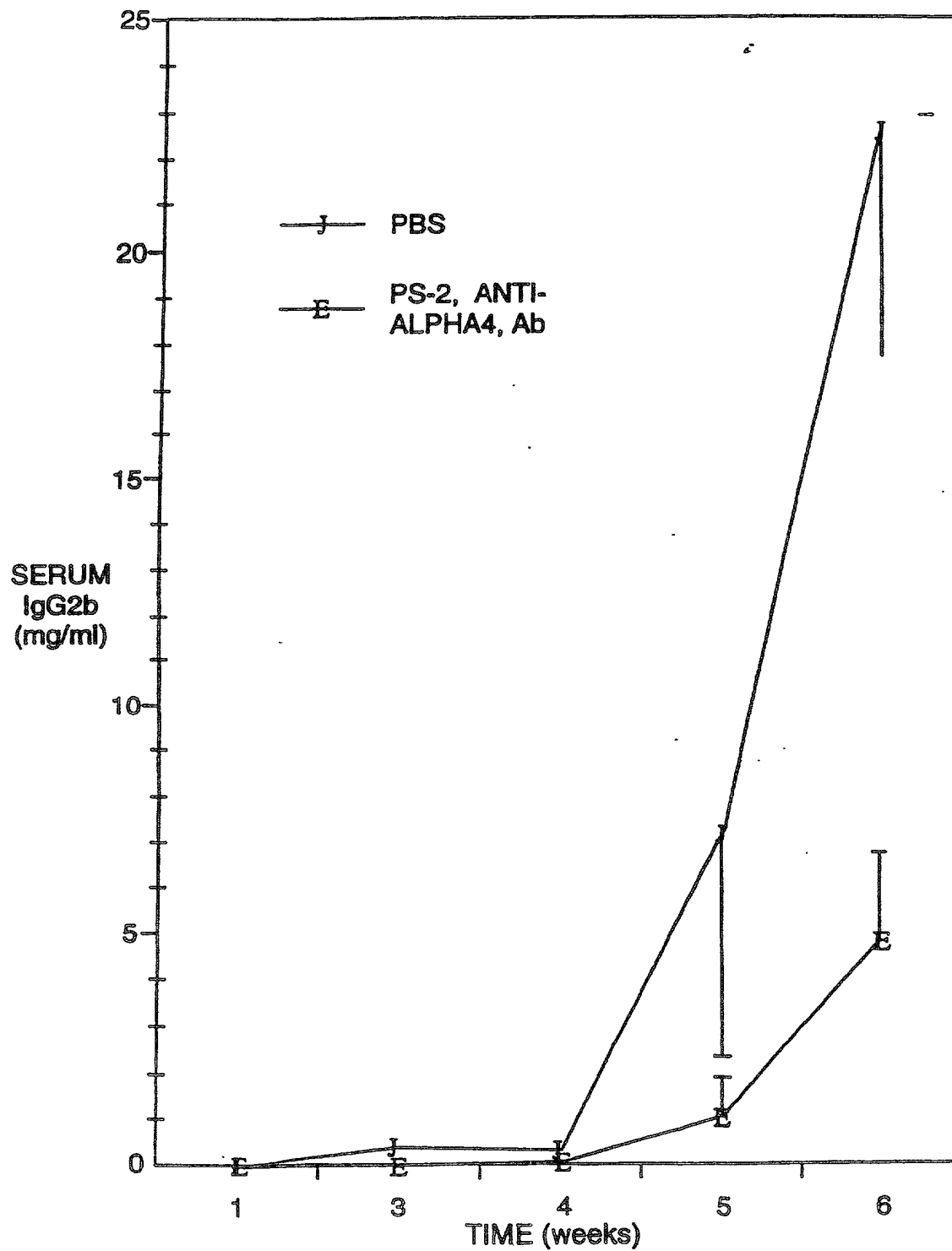


FIG. 4

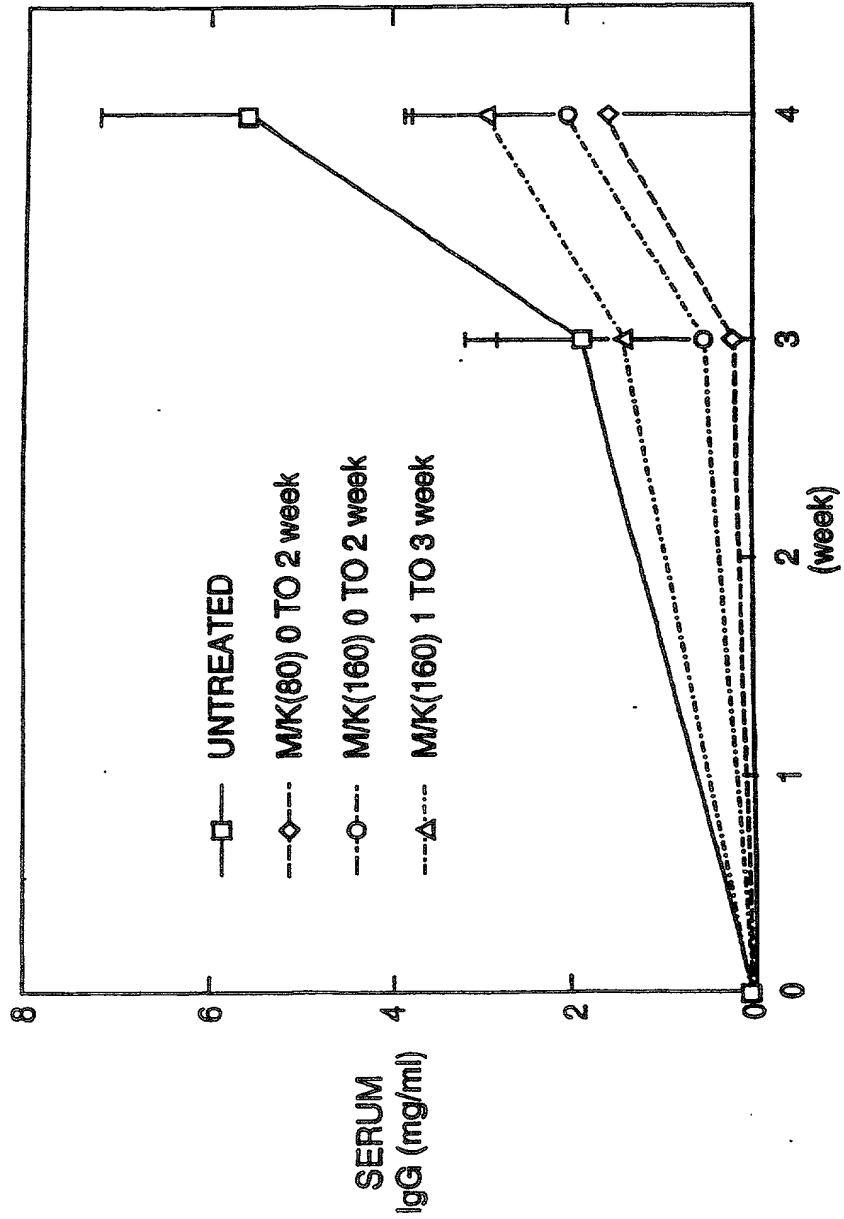
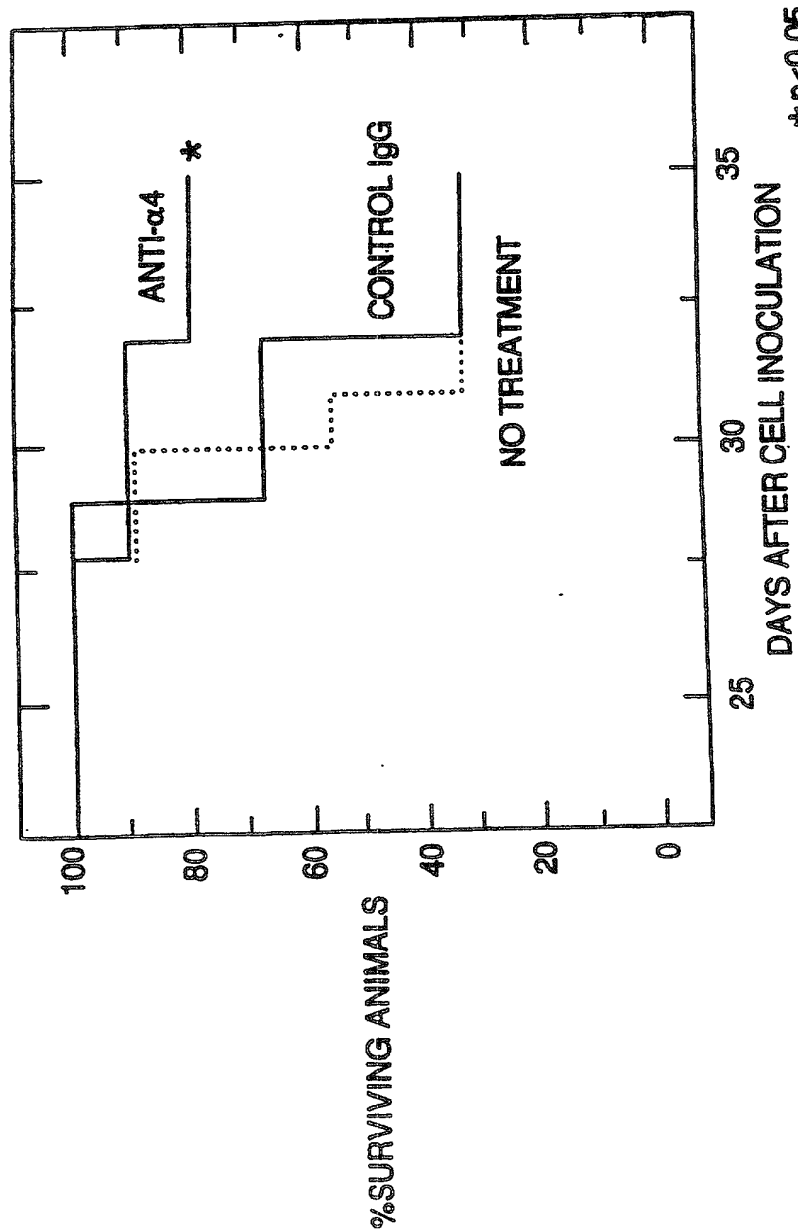


FIG. 5



* p<0.05 VERSUS NO TREATMENT

FIG. 6

Experimental Protocol

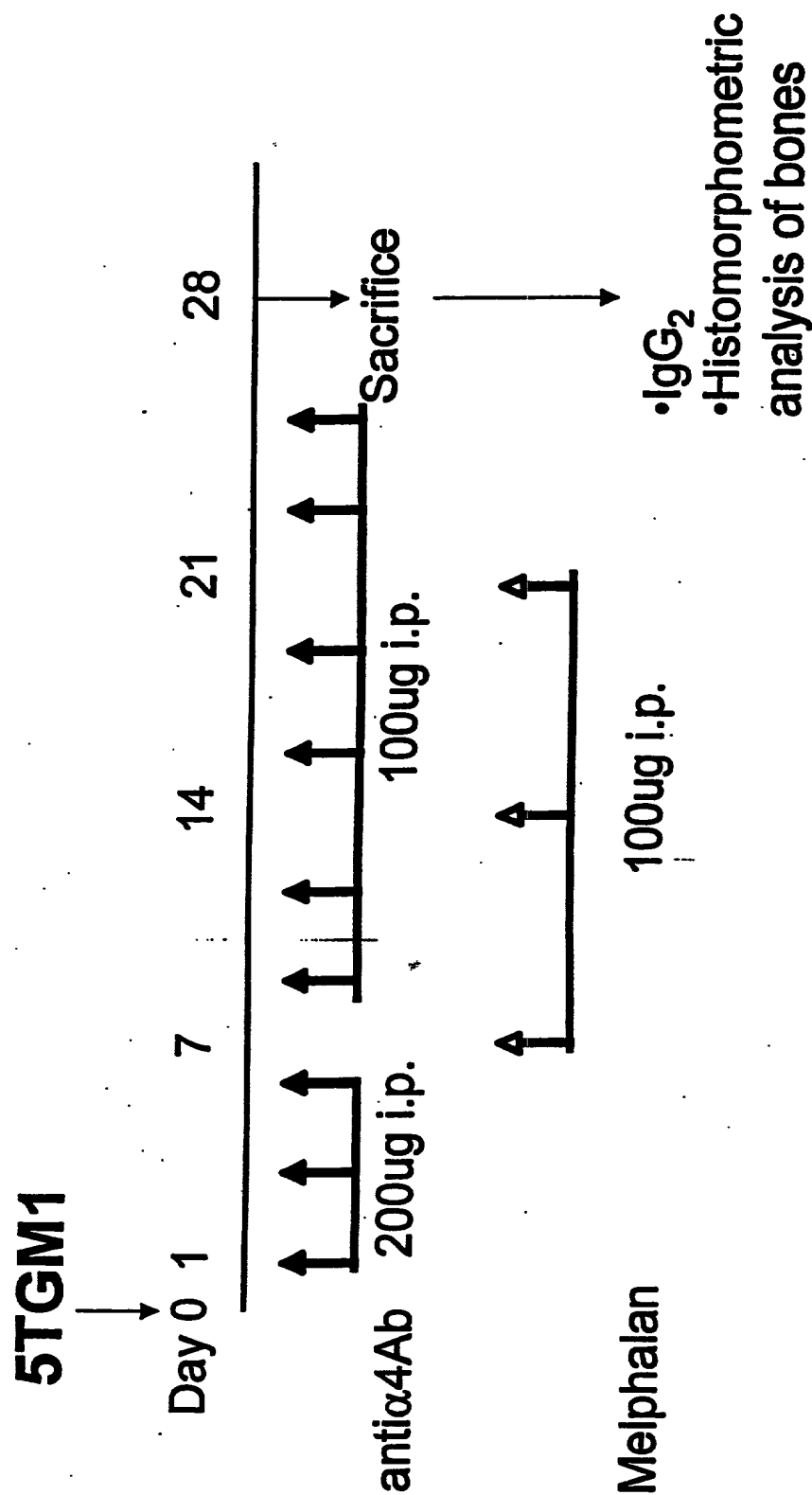
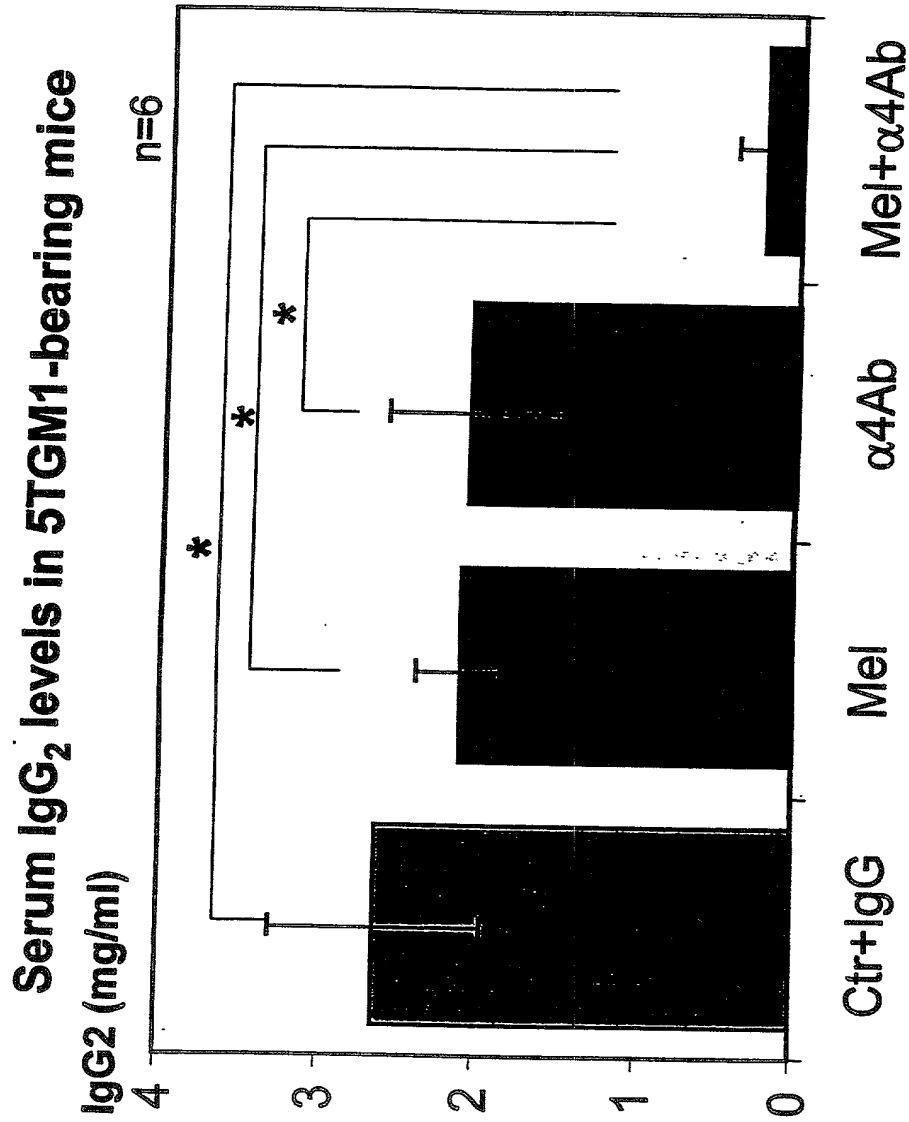


Figure 7



Tumor Volume in Bone

Treatment/no treatment (%)

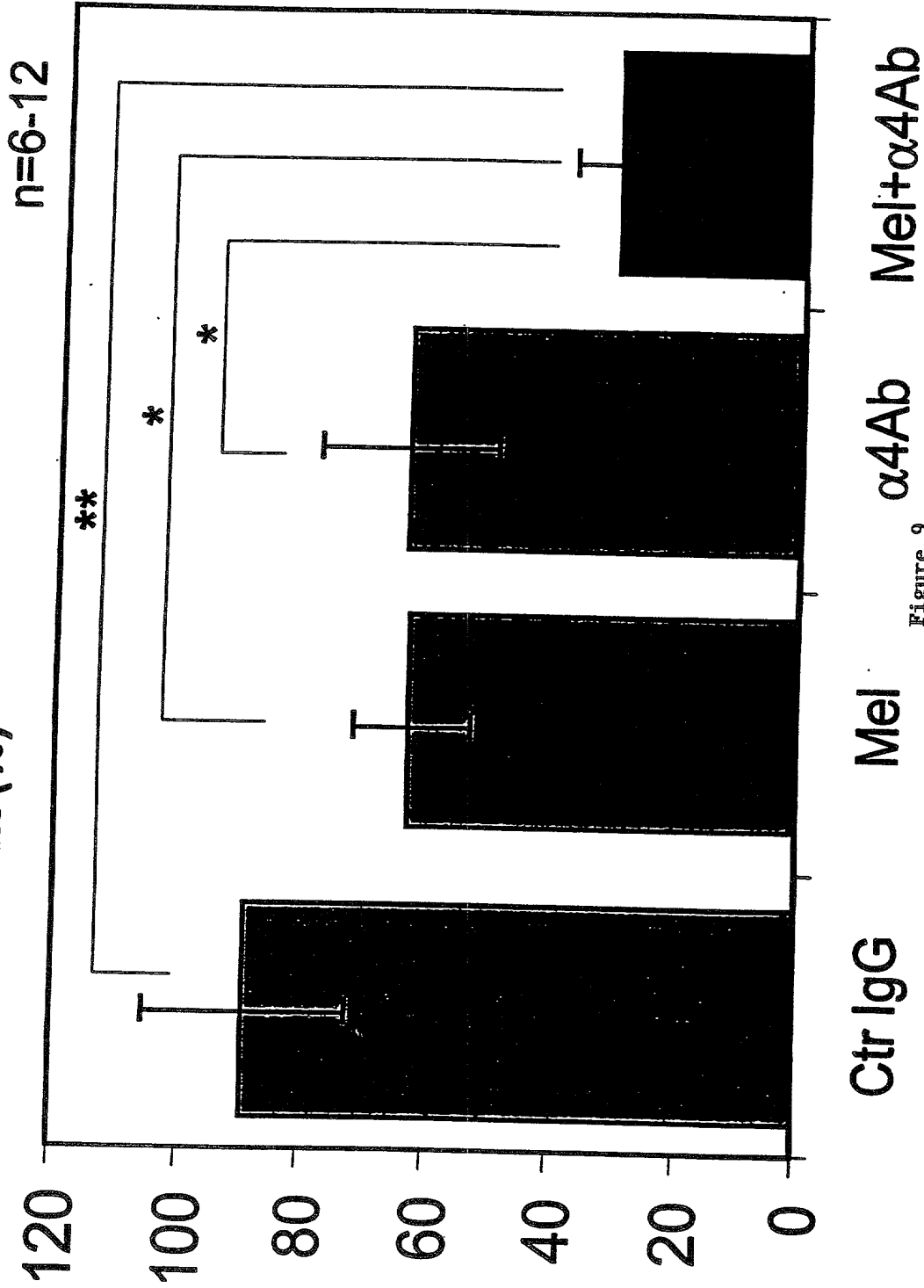


Figure 9

EFFECT OF PS/2 mAb TREATMENT
ON SPLEEN WEIGHT

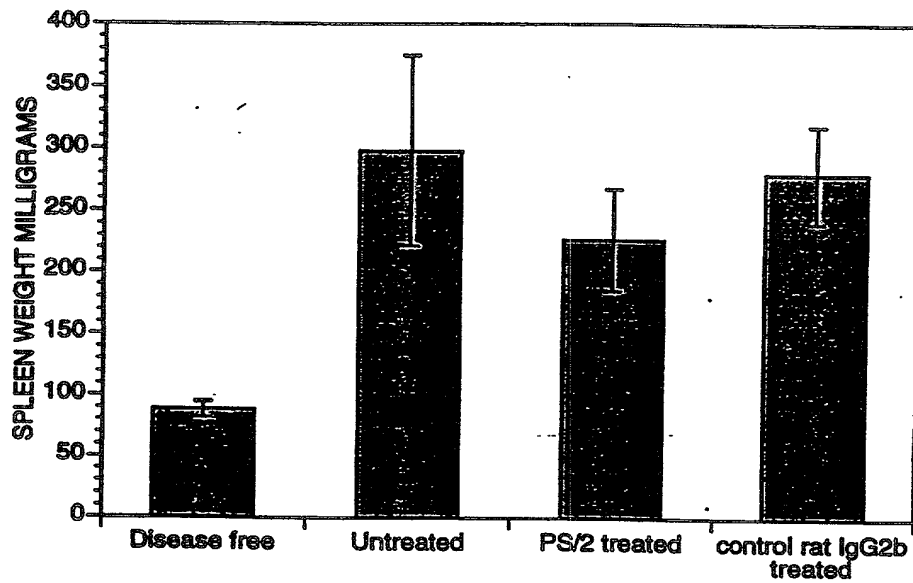


Figure 10

EFFECT OF PS/2 TREATMENT ON SPLENOCYTES IN MICE WITH 5TGM1 MYELOMA

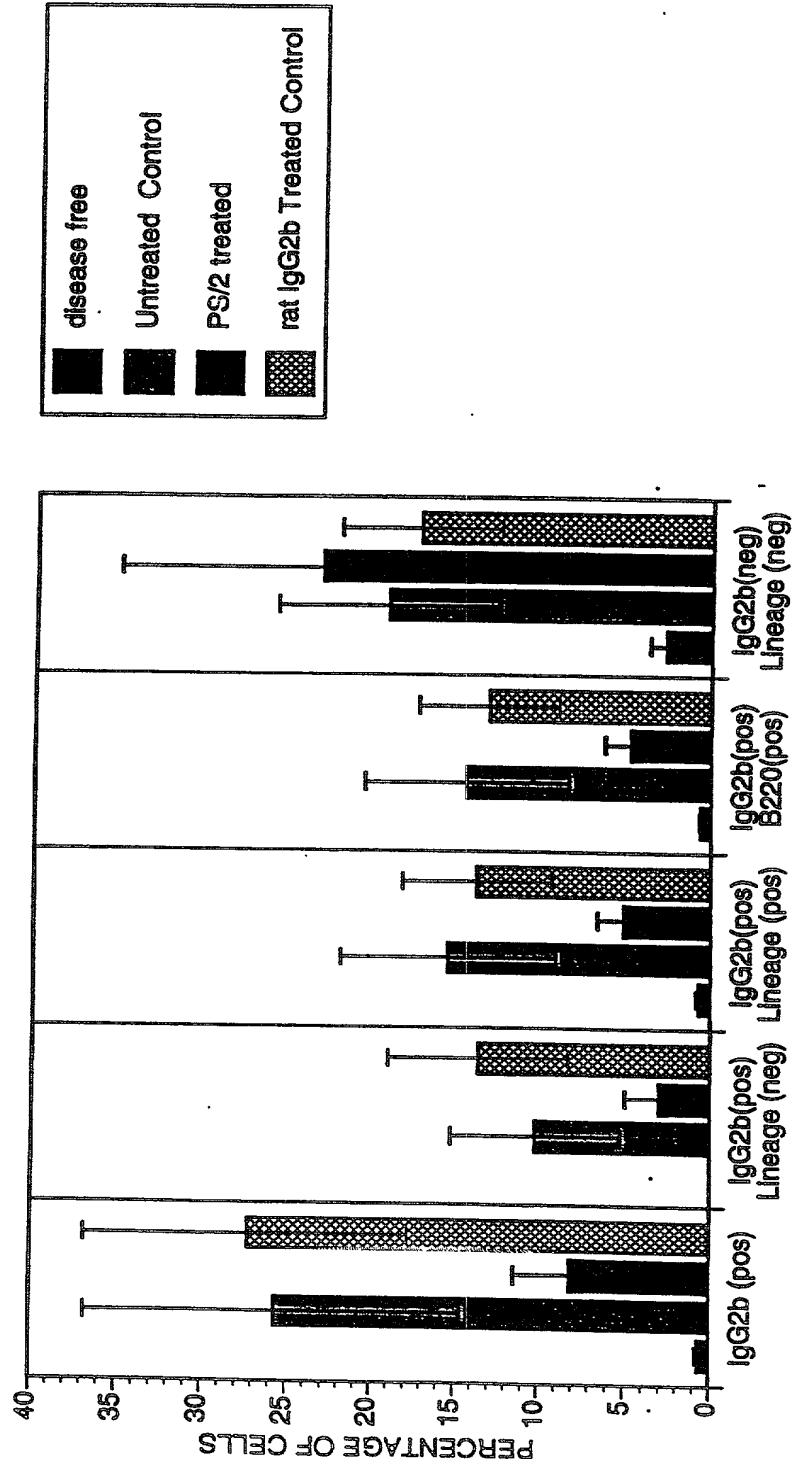
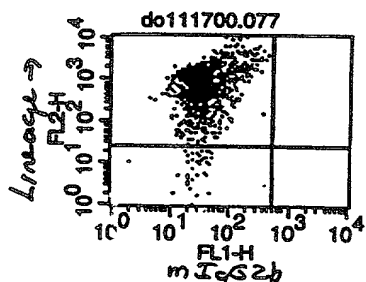


Figure 11

EFFECT OF PS/2 mAb TREATMENT ON SPLENOCYTE FACS PROFILE

DISEASE FREE

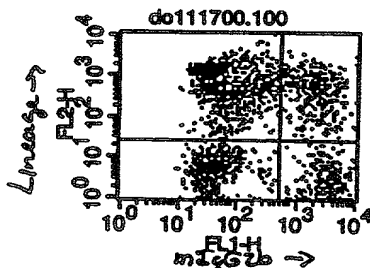


File: do111700.077
 Gate: G1
 Total Events: 10707

Acquisition Date: 17-Nov-00
 Gated Events: 9624
 Quad Location: 523, 25

| Quad | Events | % Gated | % Total | X Mean | Y Mean |
|------|--------|---------|---------|---------|---------|
| UL | 9499 | 98.70 | 88.72 | 37.11 | 1120.67 |
| UR | 3 | 0.03 | 0.03 | 5084.96 | 773.52 |
| LL | 122 | 1.27 | 1.14 | 31.88 | 11.09 |
| LR | 0 | 0.00 | 0.00 | *** | *** |

UNTREATED

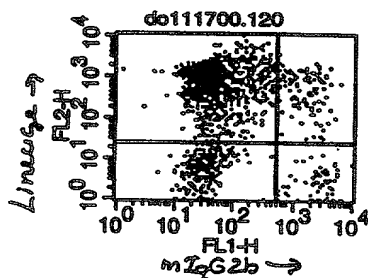


File: do111700.100
 Gate: G1
 Total Events: 11100

Acquisition Date: 17-Nov-00
 Gated Events: 9526
 Quad Location: 523, 25

| Quad | Events | % Gated | % Total | X Mean | Y Mean |
|------|--------|---------|---------|---------|---------|
| UL | 4959 | 52.06 | 44.68 | 84.30 | 1023.41 |
| UR | 1388 | 14.57 | 12.50 | 2377.81 | 704.20 |
| LL | 2163 | 22.71 | 19.49 | 50.53 | 6.64 |
| LR | 1016 | 10.67 | 9.15 | 3619.03 | 4.05 |

PS/2 TREATED

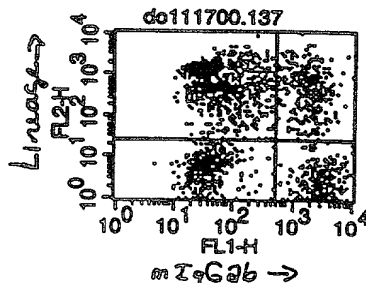


File: do111700.120
 Gate: G1
 Total Events: 10934

Acquisition Date: 17-Nov-00
 Gated Events: 9561
 Quad Location: 523, 25

| Quad | Events | % Gated | % Total | X Mean | Y Mean |
|------|--------|---------|---------|---------|---------|
| UL | 7868 | 82.29 | 71.96 | 58.00 | 1139.33 |
| UR | 310 | 3.24 | 2.84 | 1922.82 | 897.47 |
| LL | 1171 | 12.25 | 10.71 | 42.10 | 8.17 |
| LR | 212 | 2.22 | 1.94 | 3153.17 | 3.62 |

rat IgG2b TREATED



File: do111700.137
 Gate: G1
 Total Events: 10970

Acquisition Date: 17-Nov-00
 Gated Events: 9595
 Quad Location: 523, 25

| Quad | Events | % Gated | % Total | X Mean | Y Mean |
|------|--------|---------|---------|---------|--------|
| UL | 4910 | 51.17 | 44.76 | 84.95 | 975.19 |
| UR | 1384 | 14.42 | 12.62 | 1937.36 | 694.49 |
| LL | 1704 | 17.76 | 15.53 | 48.67 | 7.00 |
| LR | 1597 | 16.64 | 14.56 | 3286.15 | 2.68 |

Figure 12

EFFECT OF PS/2 mAb TREATMENT ON SPLEEN TUMOR BURDEN

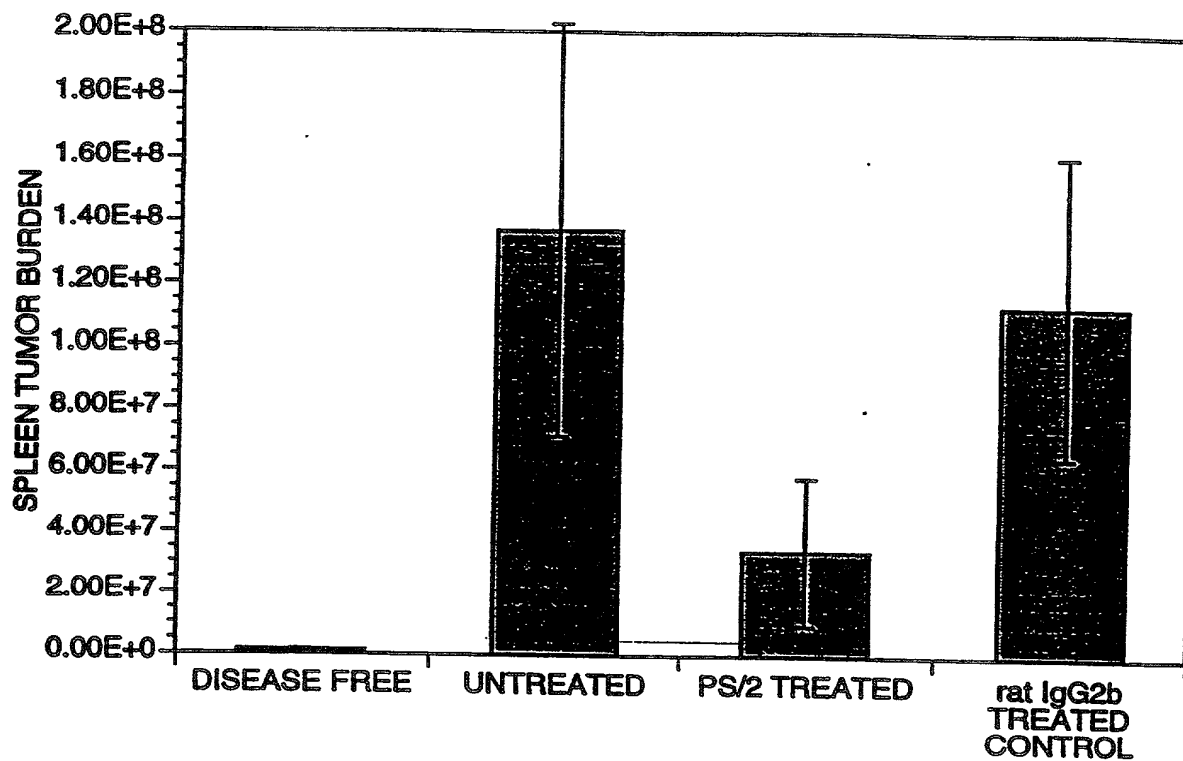


Figure 13

| Treatment | IgG2b (pos) | IgG2b (pos) Lineage (neg) | IgG2b (pos) Lineage (pos) | IgG2b (pos) B220 (pos) | IgG2b (neg) |
|---------------------------|-------------|---------------------------|---------------------------|------------------------|-------------|
| disease free | ~75 | ~42 | ~28 | ~25 | ~22 |
| Untreated Control | ~72 | ~40 | ~25 | ~22 | ~20 |
| PS/2 treated | ~70 | ~38 | ~23 | ~20 | ~18 |
| rat IgG2b Treated Control | ~72 | ~40 | ~25 | ~22 | ~20 |

Figure 14

EFFECT OF PS/2 TREATMENT ON BONE MARROW TUMOR BURDEN
mIgG2b POSITIVE CELLS

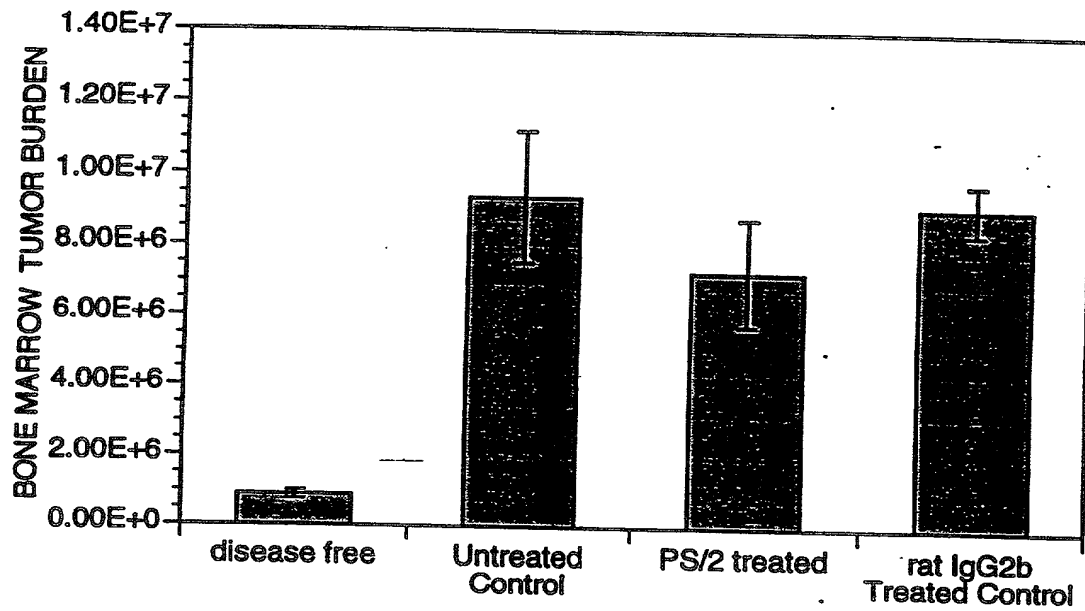


Figure 15

EFFECT OF PS/2 mAb TREATMENT
 ON 5TGM1 CELLS IN THE BLOOD

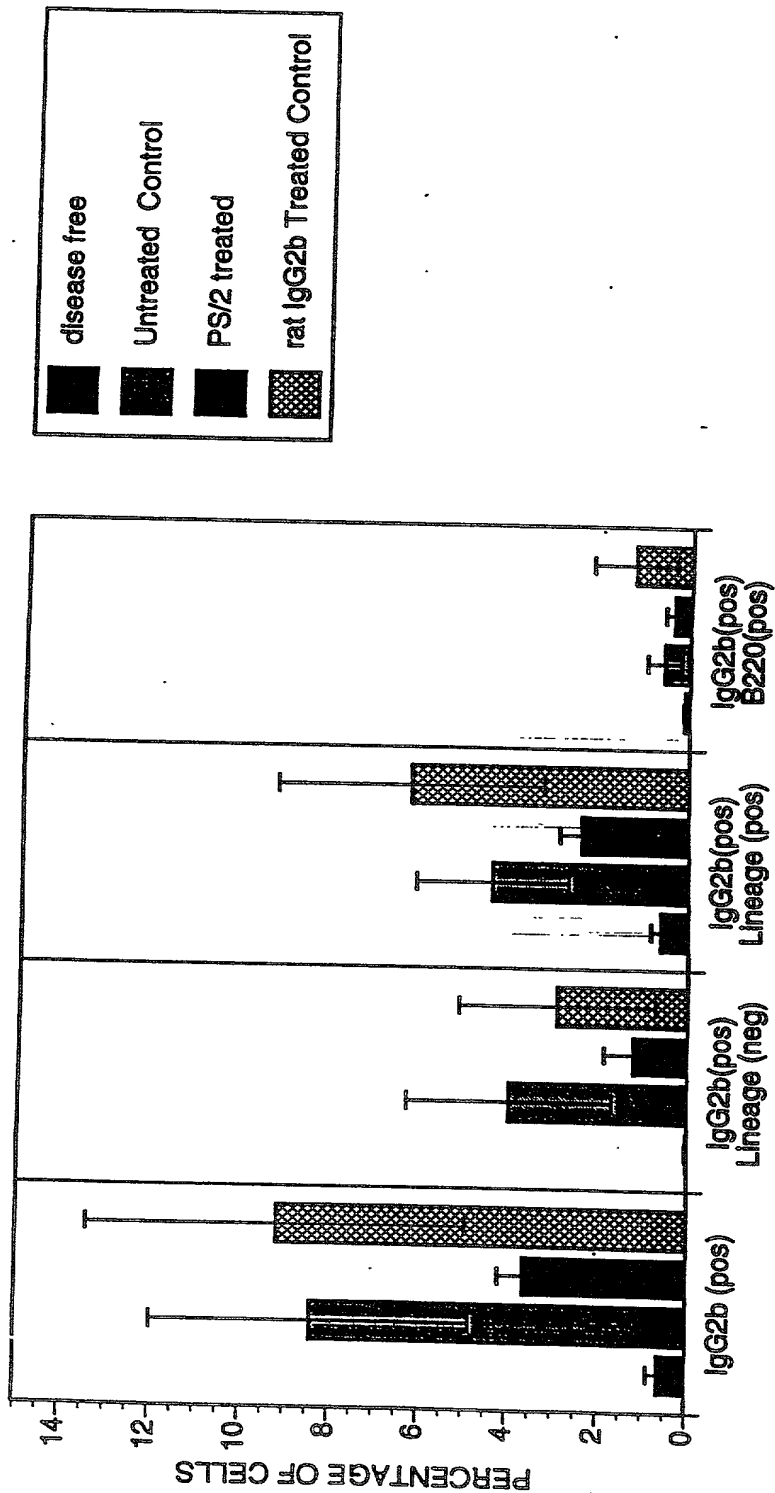


Figure 16

EFFECT OF PS/2 TREATMENT ON BLOOD CHEMISTRY

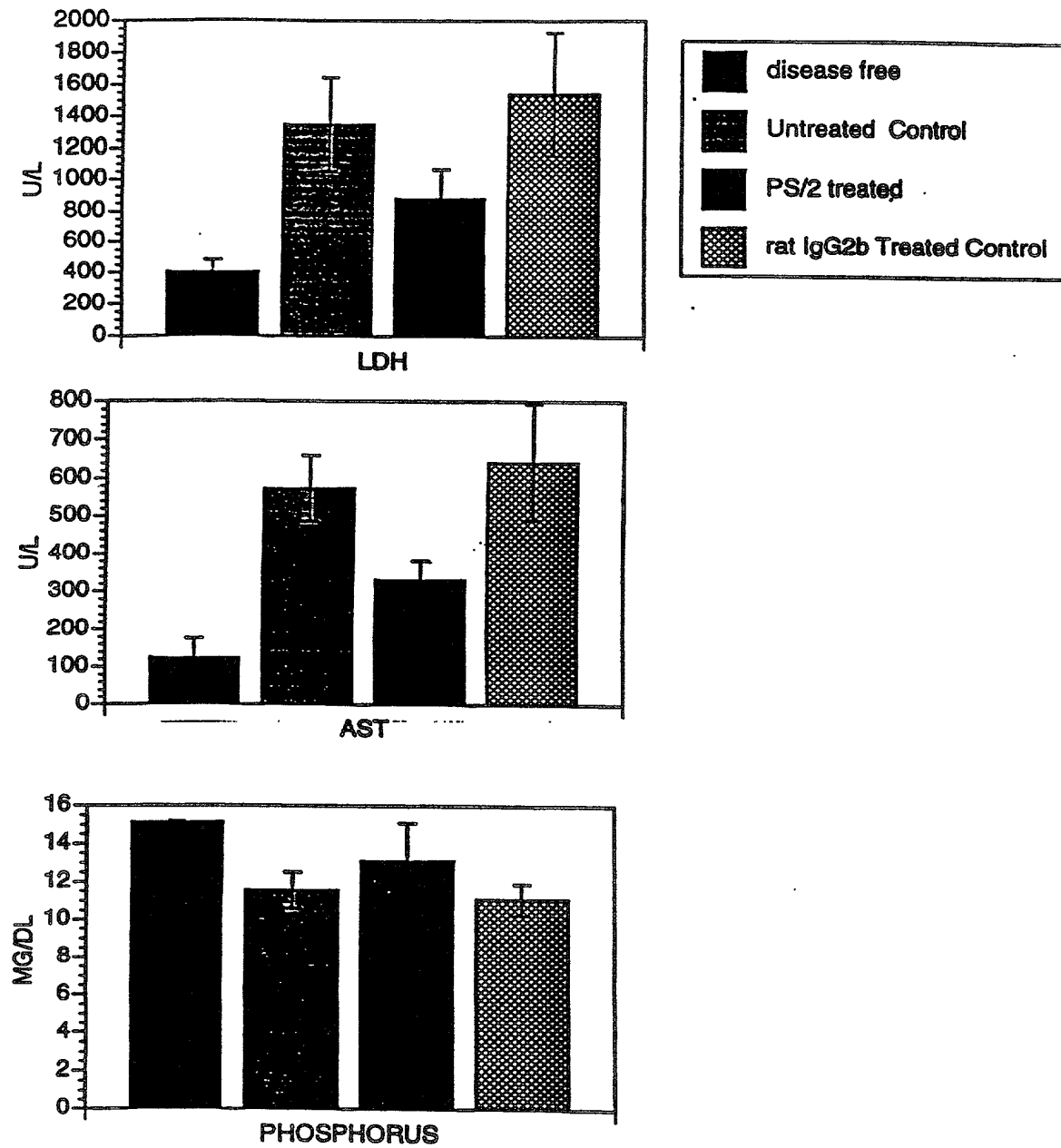


Figure 17

EFFECT OF PS/2 mAb ON
CIRCULATION mIgG2b LEVELS

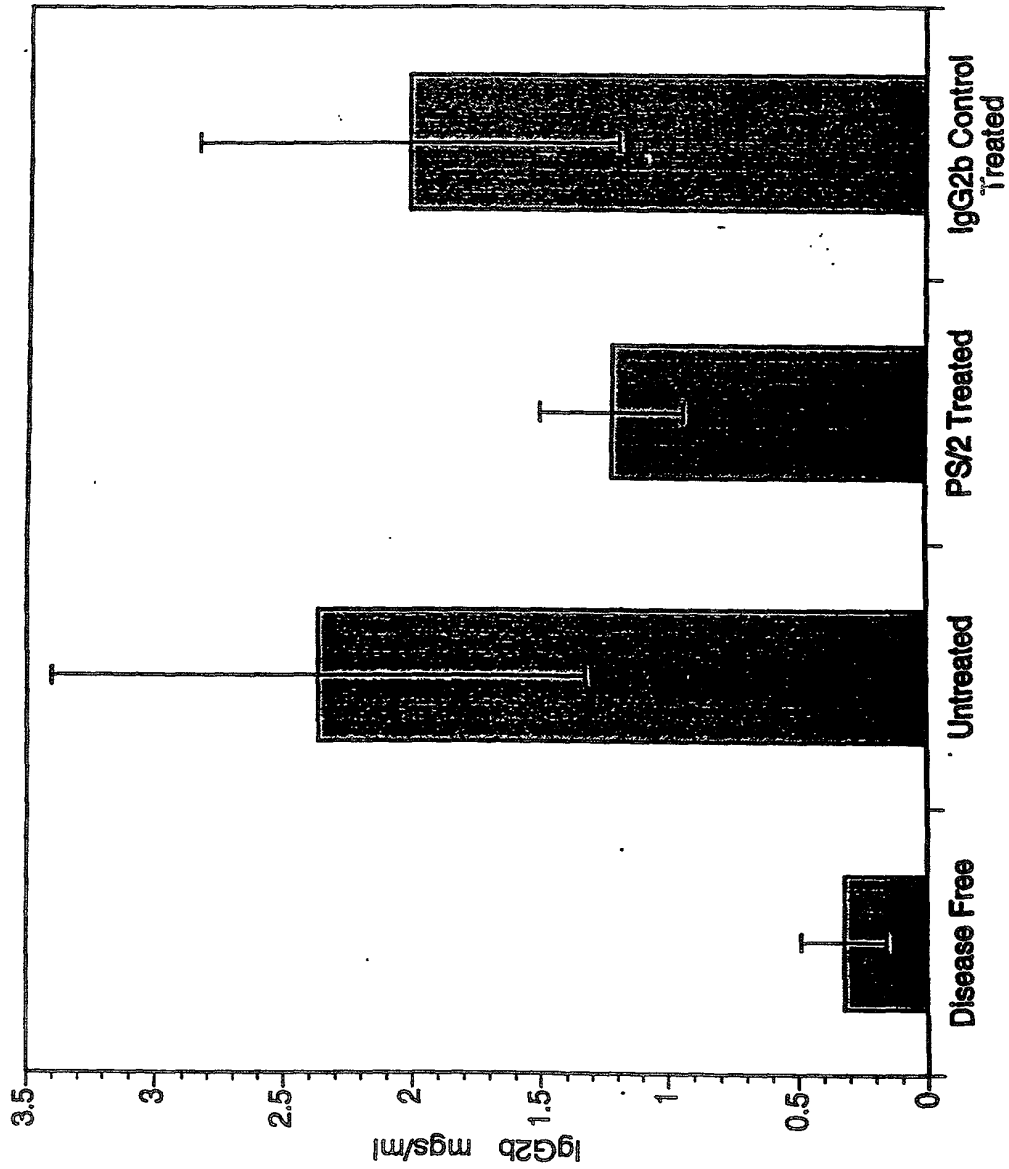
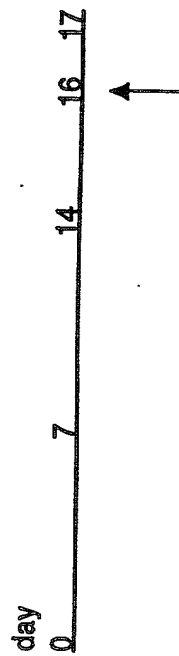


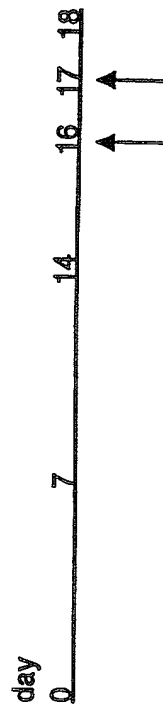
Figure 18

**C57/BI KaLwRaj MULTIPLE MYELOMA MODEL
ACUTE TREATMENT PROTOCOLS**

1 (200 microgram) PS/2 TREATMENT / 1 DAY N=3/GROUP



2 (200 microgram) PS/2 TREATMENTS/ 2 DAYS N=3/GROUP



6 (200 microgram) PS/2 TREATMENTS/6 DAYS N=5/GROUP

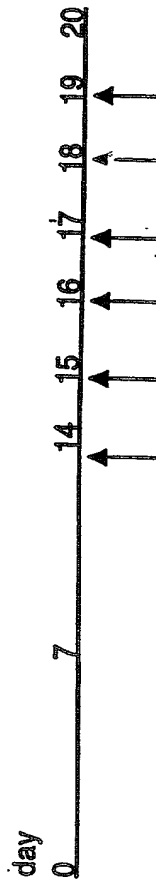


Figure 19

EFFECT OF PS/2 TREATMENT ON IgG2b POSITIVE CELLS ACUTE TREATMENT MODEL

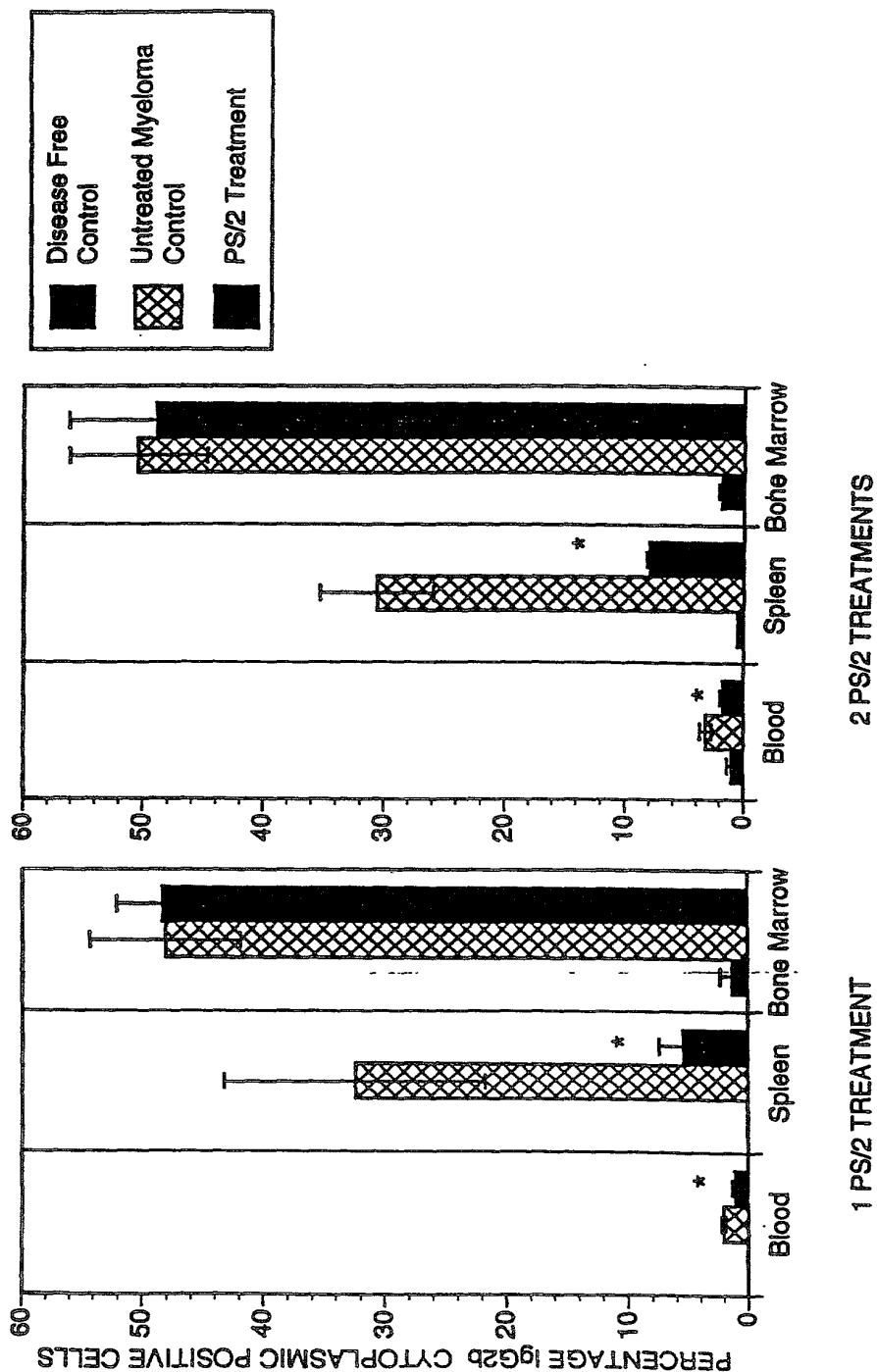


Figure 20

EFFECT OF ANTI VLA-4 ANTIBODY PS/2 ON TUMOR BURDEN IN SPLEEN

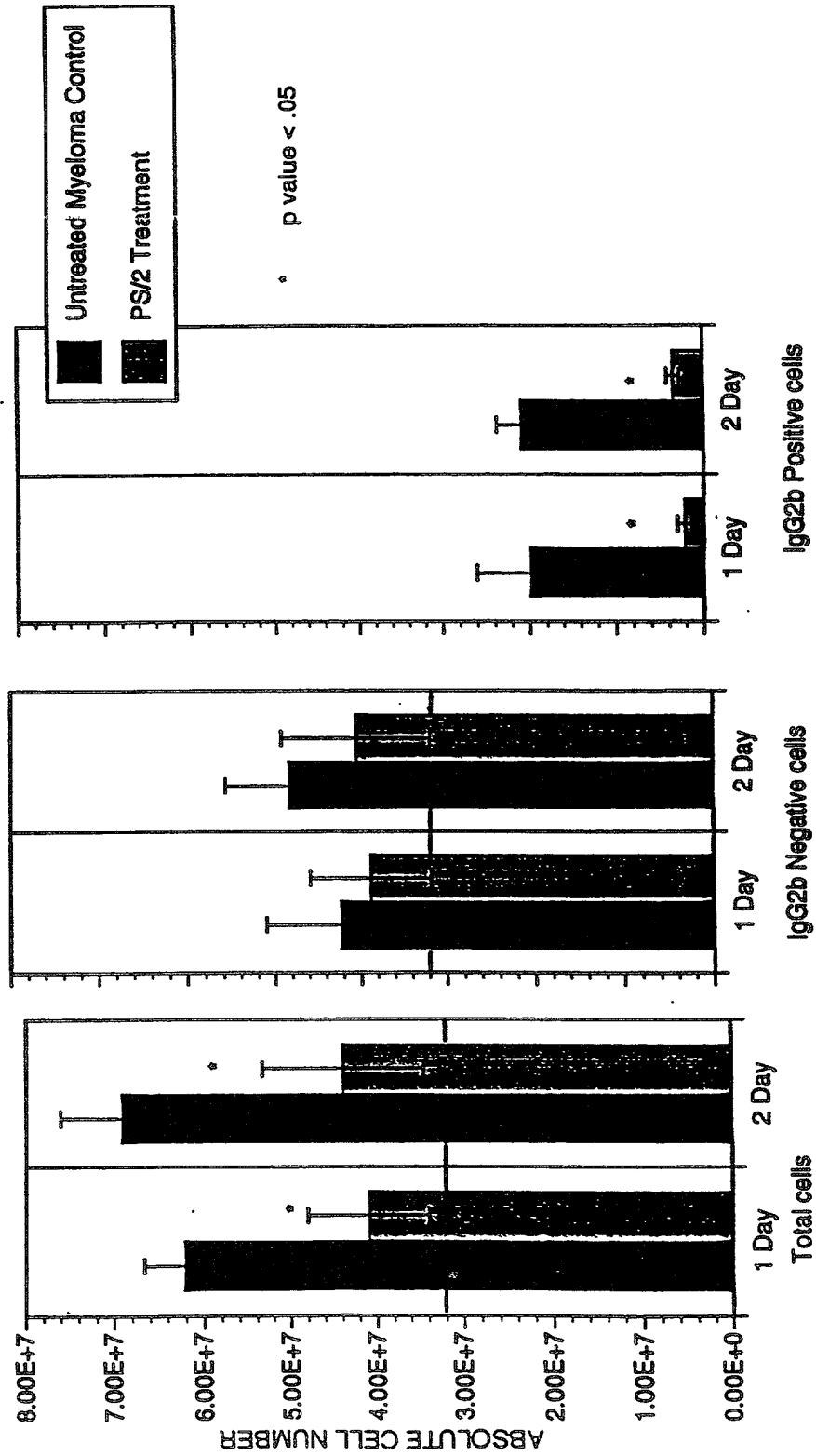


Figure 21

EFFECT OF 6 DAYS OF PS/2 TREATMENT

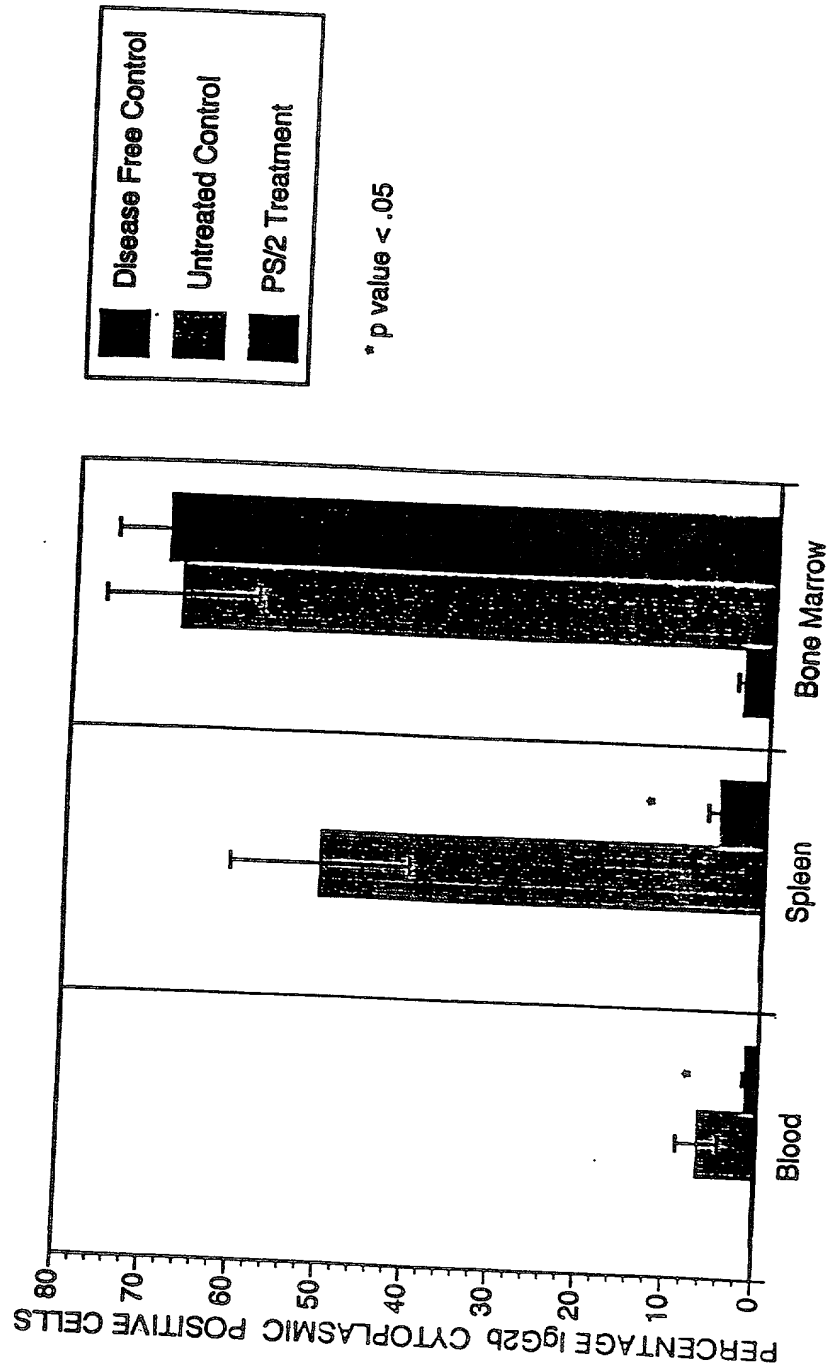


Figure 22

EFFECT OF 6 DAYS OF PS/2 TREATMENT ON BONE MARROW CELLS

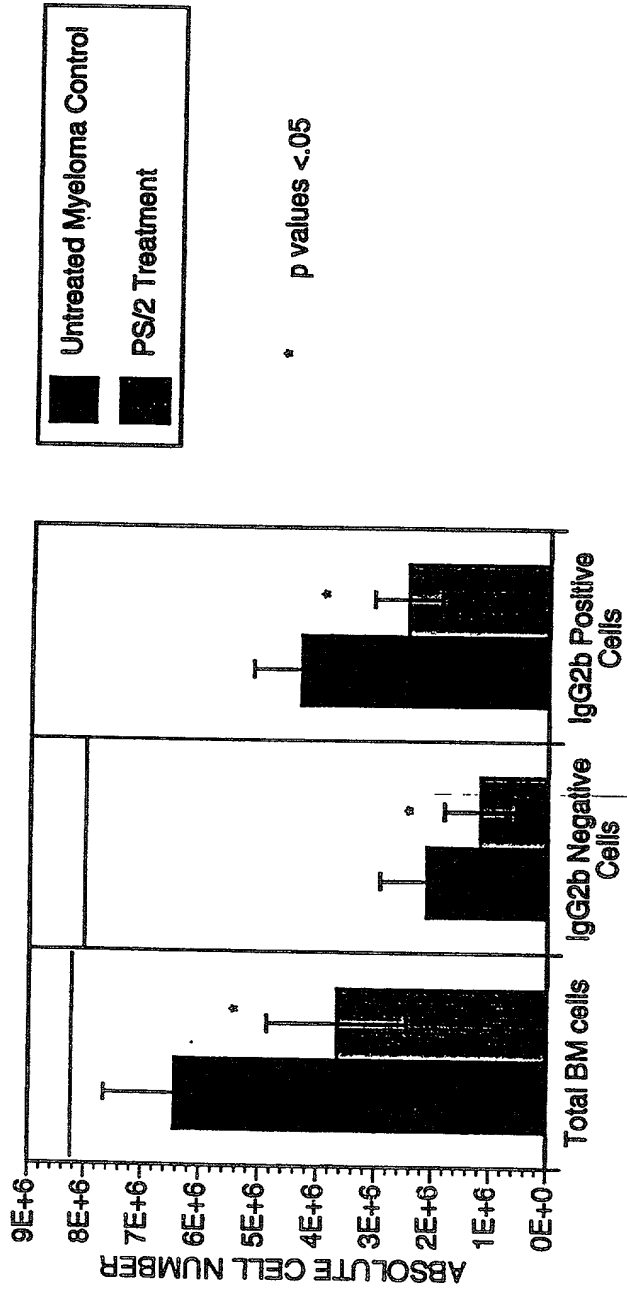


Figure 23

| Parameter | Unit | Value | Standard Error | 95% CI | P-value |
|------------|------|-------|----------------|-------------|---------|
| Intercept | | 1.00 | 0.00 | 1.00 | 0.00 |
| Age | Year | 0.02 | 0.01 | -0.01, 0.05 | 0.15 |
| Gender | | | | | |
| Male | | 0.01 | 0.01 | -0.01, 0.03 | 0.45 |
| Female | | -0.01 | 0.01 | -0.03, 0.01 | 0.45 |
| Education | Year | 0.01 | 0.01 | -0.01, 0.03 | 0.35 |
| Income | Year | 0.01 | 0.01 | -0.01, 0.03 | 0.35 |
| Health | | | | | |
| Good | | 0.01 | 0.01 | -0.01, 0.03 | 0.45 |
| Poor | | -0.01 | 0.01 | -0.03, 0.01 | 0.45 |
| Occupation | | | | | |
| Manager | | 0.01 | 0.01 | -0.01, 0.03 | 0.45 |
| Worker | | -0.01 | 0.01 | -0.03, 0.01 | 0.45 |
| Unemployed | | 0.01 | 0.01 | -0.01, 0.03 | 0.45 |
| Retired | | -0.01 | 0.01 | -0.03, 0.01 | 0.45 |
| Married | | 0.01 | 0.01 | -0.01, 0.03 | 0.45 |
| Divorced | | -0.01 | 0.01 | -0.03, 0.01 | 0.45 |
| Widowed | | 0.01 | 0.01 | -0.01, 0.03 | 0.45 |
| Single | | -0.01 | 0.01 | -0.03, 0.01 | 0.45 |
| Children | | | | | |
| 0 | | 0.01 | 0.01 | -0.01, 0.03 | 0.45 |
| 1 | | -0.01 | 0.01 | -0.03, 0.01 | 0.45 |
| 2 | | 0.01 | 0.01 | -0.01, 0.03 | 0.45 |
| 3 | | -0.01 | 0.01 | -0.03, 0.01 | 0.45 |
| 4 | | 0.01 | 0.01 | -0.01, 0.03 | 0.45 |
| 5 | | -0.01 | 0.01 | -0.03, 0.01 | 0.45 |
| 6 | | 0.01 | 0.01 | -0.01, 0.03 | 0.45 |
| 7 | | -0.01 | 0.01 | -0.03, 0.01 | 0.45 |
| 8 | | 0.01 | 0.01 | -0.01, 0.03 | 0.45 |
| 9 | | -0.01 | 0.01 | -0.03, 0.01 | 0.45 |
| 10 | | 0.01 | 0.01 | -0.01, 0.03 | 0.45 |
| 11 | | -0.01 | 0.01 | -0.03, 0.01 | 0.45 |
| 12 | | 0.01 | 0.01 | -0.01, 0.03 | 0.45 |
| 13 | | -0.01 | 0.01 | -0.03, 0.01 | 0.45 |
| 14 | | 0.01 | 0.01 | -0.01, 0.03 | 0.45 |
| 15 | | -0.01 | 0.01 | -0.03, 0.01 | 0.45 |
| 16 | | 0.01 | 0.01 | -0.01, 0.03 | 0.45 |
| 17 | | -0.01 | 0.01 | -0.03, 0.01 | 0.45 |
| 18 | | 0.01 | 0.01 | -0.01, 0.03 | 0.45 |
| 19 | | -0.01 | 0.01 | -0.03, 0.01 | 0.45 |
| 20 | | 0.01 | 0.01 | -0.01, 0.03 | 0.45 |
| 21 | | -0.01 | 0.01 | -0.03, 0.01 | 0.45 |
| 22 | | 0.01 | 0.01 | -0.01, 0.03 | 0.45 |
| 23 | | -0.01 | 0.01 | -0.03, 0.01 | 0.45 |
| 24 | | 0.01 | 0.01 | -0.01, 0.03 | 0.45 |
| 25 | | -0.01 | 0.01 | -0.03, 0.01 | 0.45 |
| 26 | | 0.01 | 0.01 | -0.01, 0.03 | 0.45 |
| 27 | | -0.01 | 0.01 | -0.03, 0.01 | 0.45 |
| 28 | | 0.01 | 0.01 | -0.01, 0.03 | 0.45 |
| 29 | | -0.01 | 0.01 | -0.03, 0.01 | 0.45 |
| 30 | | 0.01 | 0.01 | -0.01, 0.03 | 0.45 |
| 31 | | -0.01 | 0.01 | -0.03, 0.01 | 0.45 |
| 32 | | 0.01 | 0.01 | -0.01, 0.03 | 0.45 |
| 33 | | -0.01 | 0.01 | -0.03, 0.01 | 0.45 |
| 34 | | 0.01 | 0.01 | -0.01, 0.03 | 0.45 |
| 35 | | -0.01 | 0.01 | -0.03, 0.01 | 0.45 |
| 36 | | 0.01 | 0.01 | -0.01, 0.03 | 0.45 |
| 37 | | -0.01 | 0.01 | -0.03, 0.01 | 0.45 |
| 38 | | 0.01 | 0.01 | -0.01, 0.03 | 0.45 |
| 39 | | -0.01 | 0.01 | -0.03, 0.01 | 0.45 |
| 40 | | 0.01 | 0.01 | -0.01, 0.03 | 0.45 |
| 41 | | -0.01 | 0. | | |



EFFECT OF TREATMENT ON mIgG2b PLASMA LEVELS

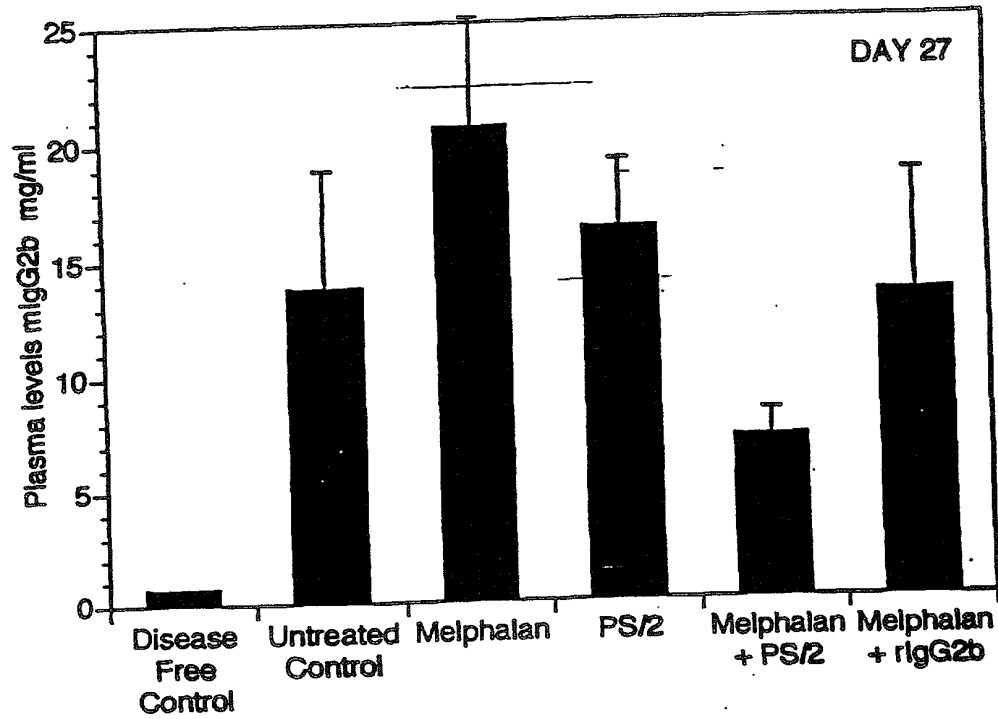


Figure 25

EFFECT OF TREATMENT ON MYELOMA CELLS AT DAY 27

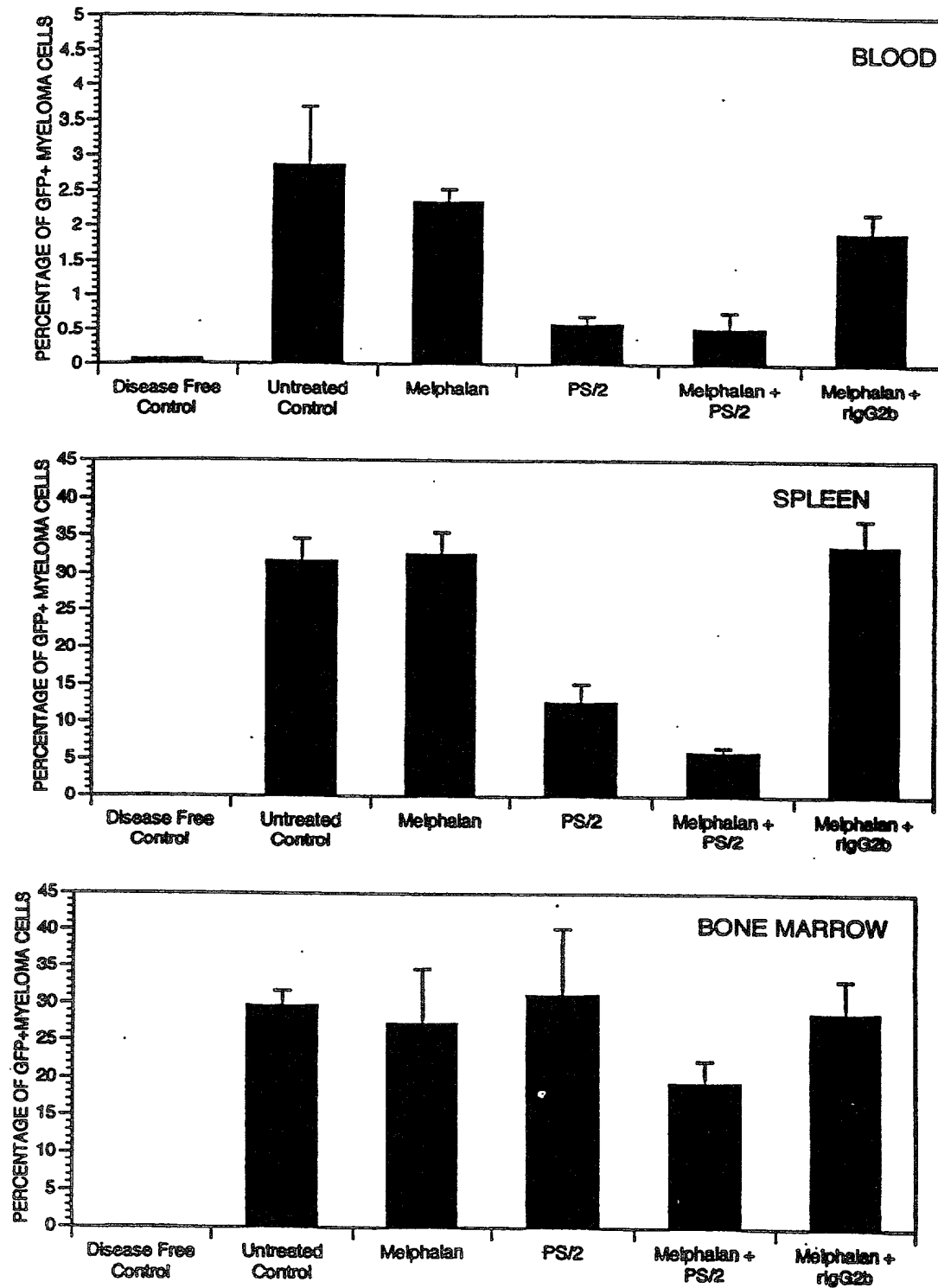


Figure 26

EFFECT OF TREATMENT ON TUMOR BURDEN AT DAY 27

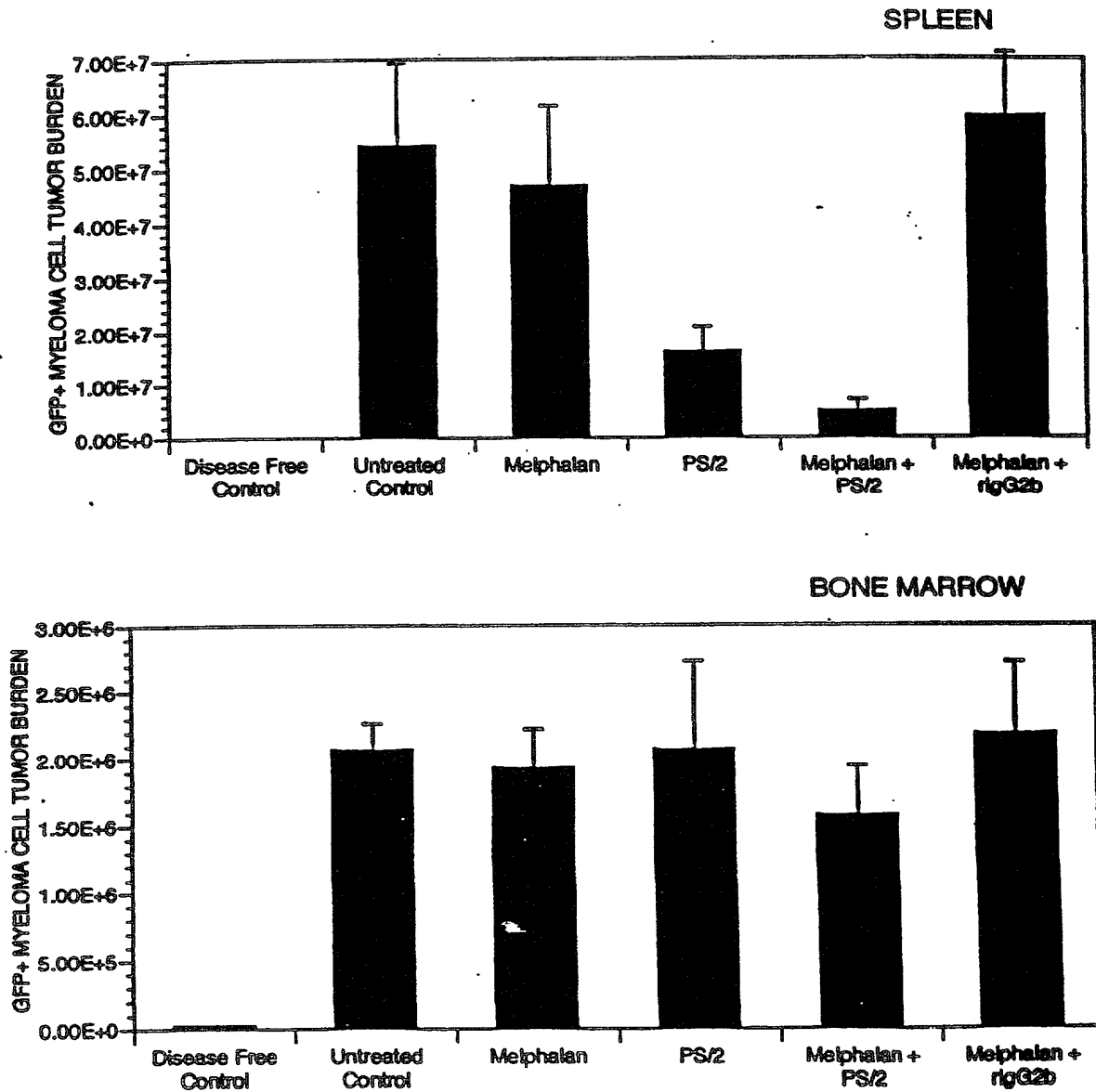
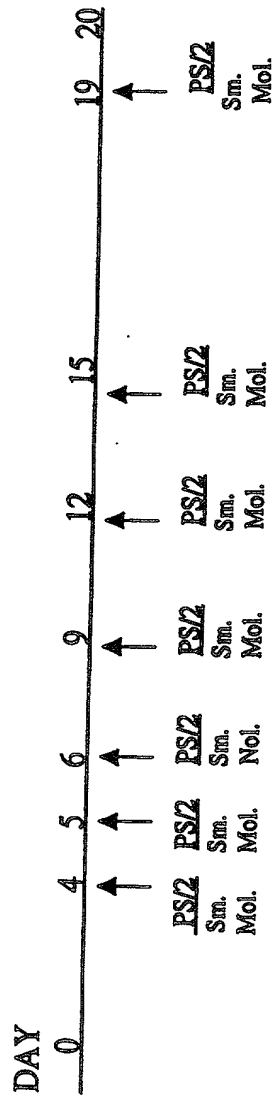


Figure 27

| | Day 20 | day 27 |
|-------------------|--------------------|--------------------|
| | PS/2 Plasma levels | PS/2 Plasma levels |
| 8-PS/2 | none detected | none detected |
| 9-PS/2 | none detected | none detected |
| 10-PS/2 | none detected | none detected |
| 11-melphalan+PS/2 | none detected | none detected |
| 12-melphalan+PS/2 | 3.7 µg/ml | none detected |
| 13-melphalan+PS/2 | none detected | none detected |

Figure 28

**C57/BIK_aL_wRaj MODEL OF MULTIPLE MYELOMA
 PS/2 AND ANTI VLA4 SMALL MOLECULE
 LONG TERM TREATMENT**



**5TGM1 CELLS (1E6) INJECTED(I.V.) ON DAY 0
 EFFECTIVNESS OF TREATMENT WAS EVALUATED ON DAY 20**

GROUPS N=2/GROUP
DISEASE FREE CONTROL
UNTREATED MYELOMA CONTROL
PS/2 --100 micrograms/injection
Sm. Mol . 8809--3 mg/kg, 0.3 mg/kg or 0.03 mg/kg
Sm. Mol. 9257 CONTROL -- 3 mg/kg

Figure 29

EFFECT OF LONG TERM TREATMENT ON MYELOMA CELLS

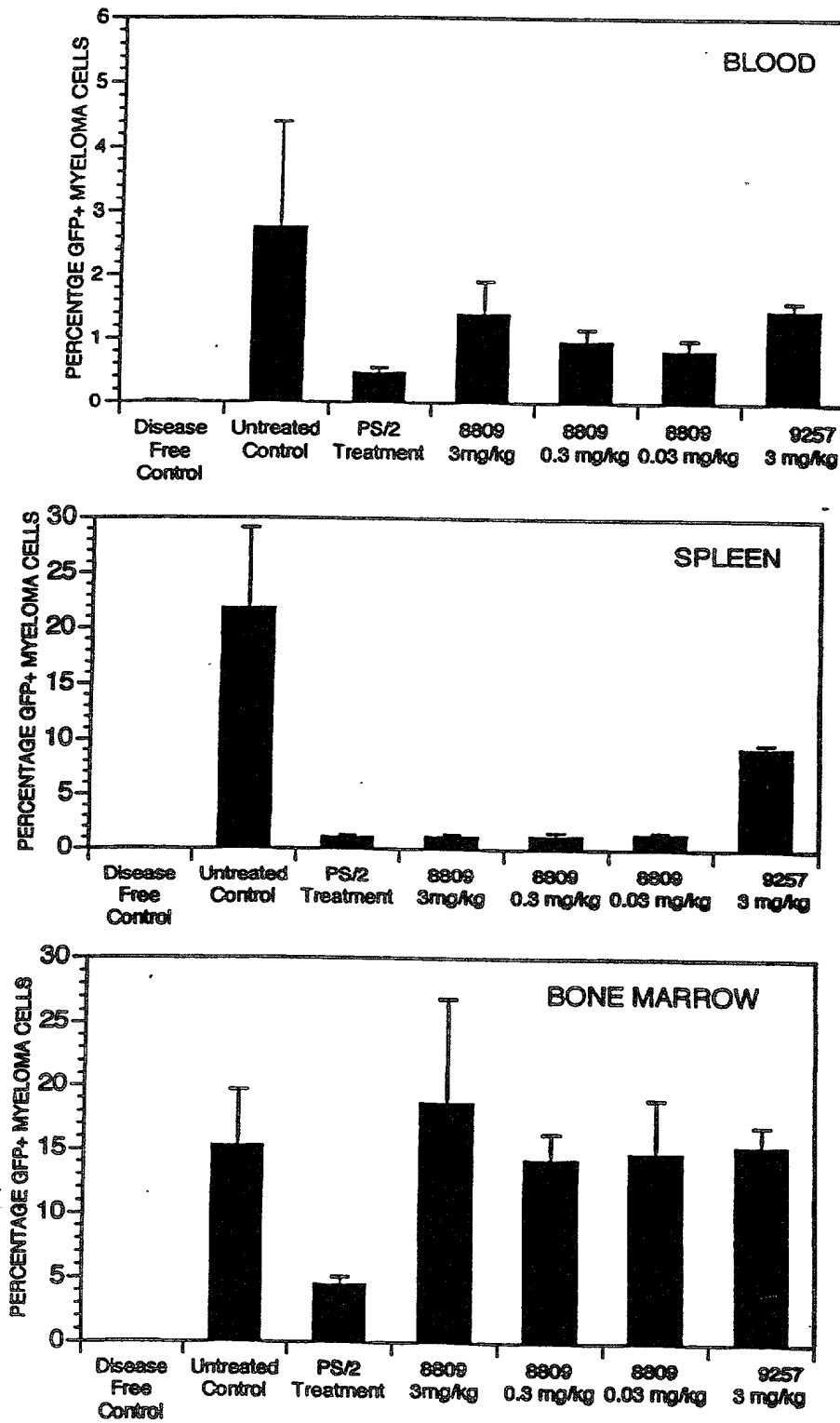


Figure 30

EFFECT OF LONG TERM TREATMENT ON TUMOR BURDEN

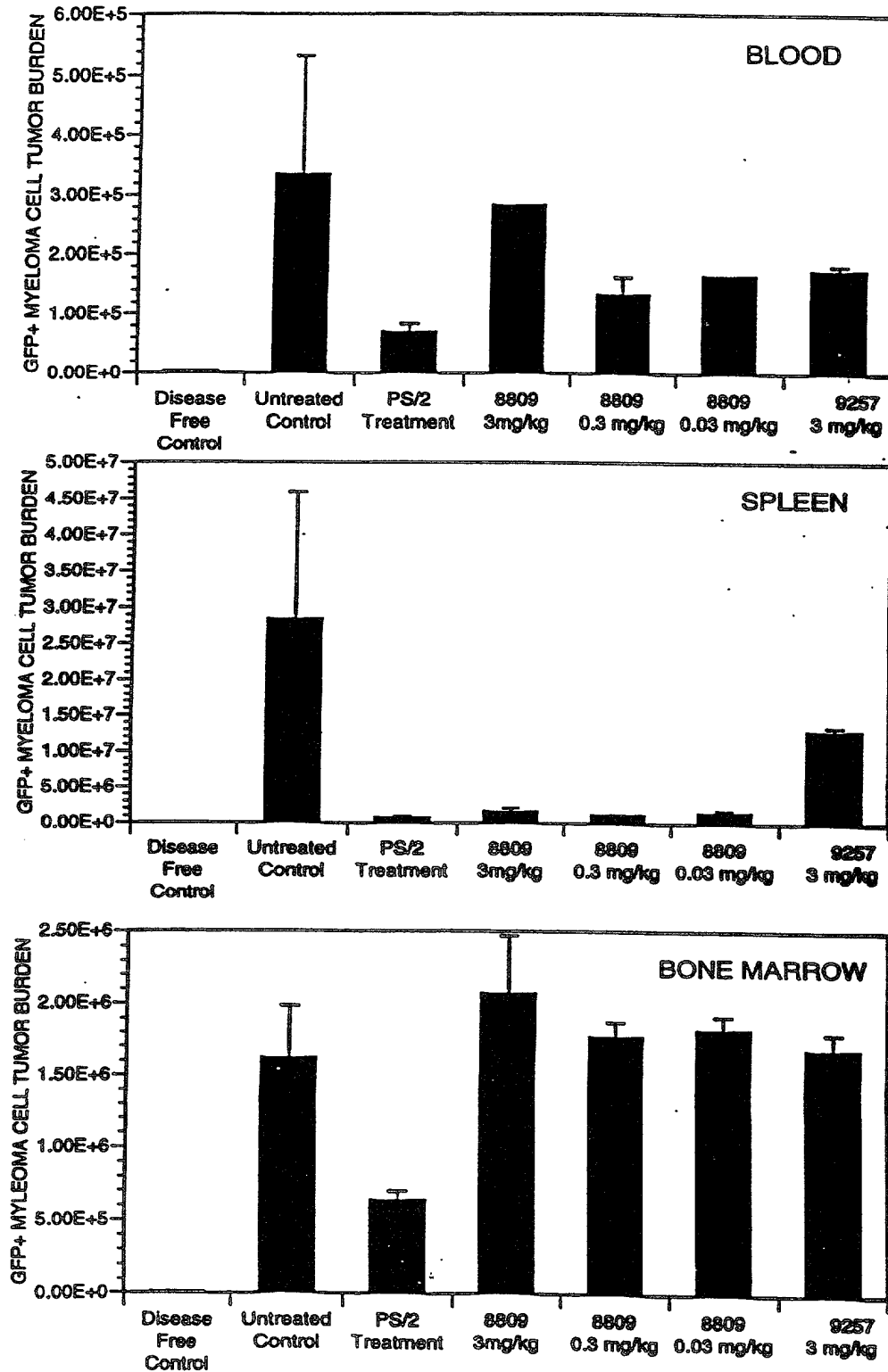
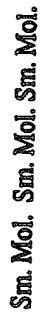


Figure 31

ACUTE TREATMENT



EFFECTIVENESS OF TREATMENT WAS EVALUATED ON DAY 21

9257 CONTROL -- 3 mg/kg

Figure 32

EFFECT OF ACUTE TREATMENT ON MYELOMA CELLS

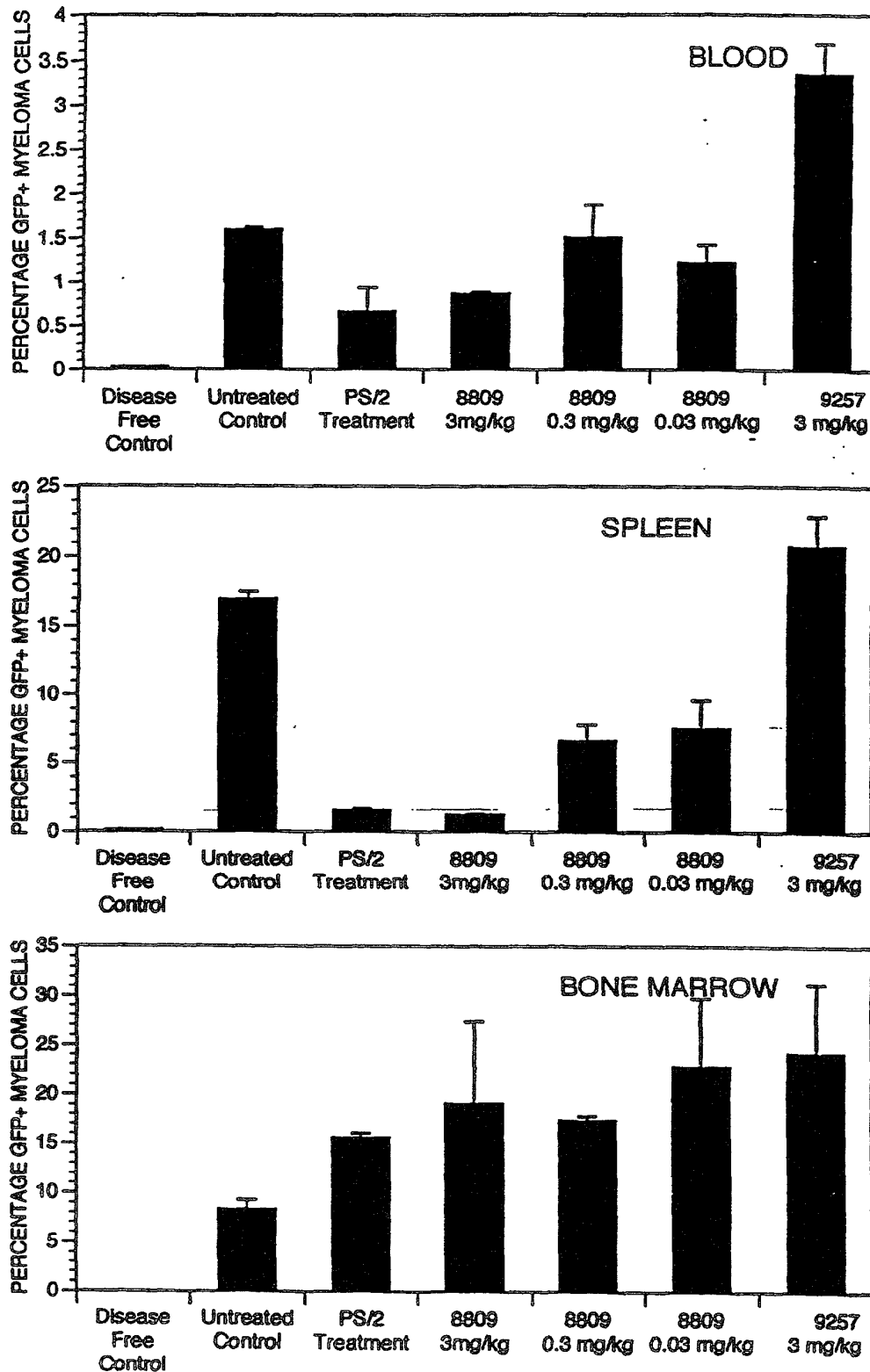


Figure 33

EFFECT OF ACUTE TREATMENT ON TUMOR BUREN

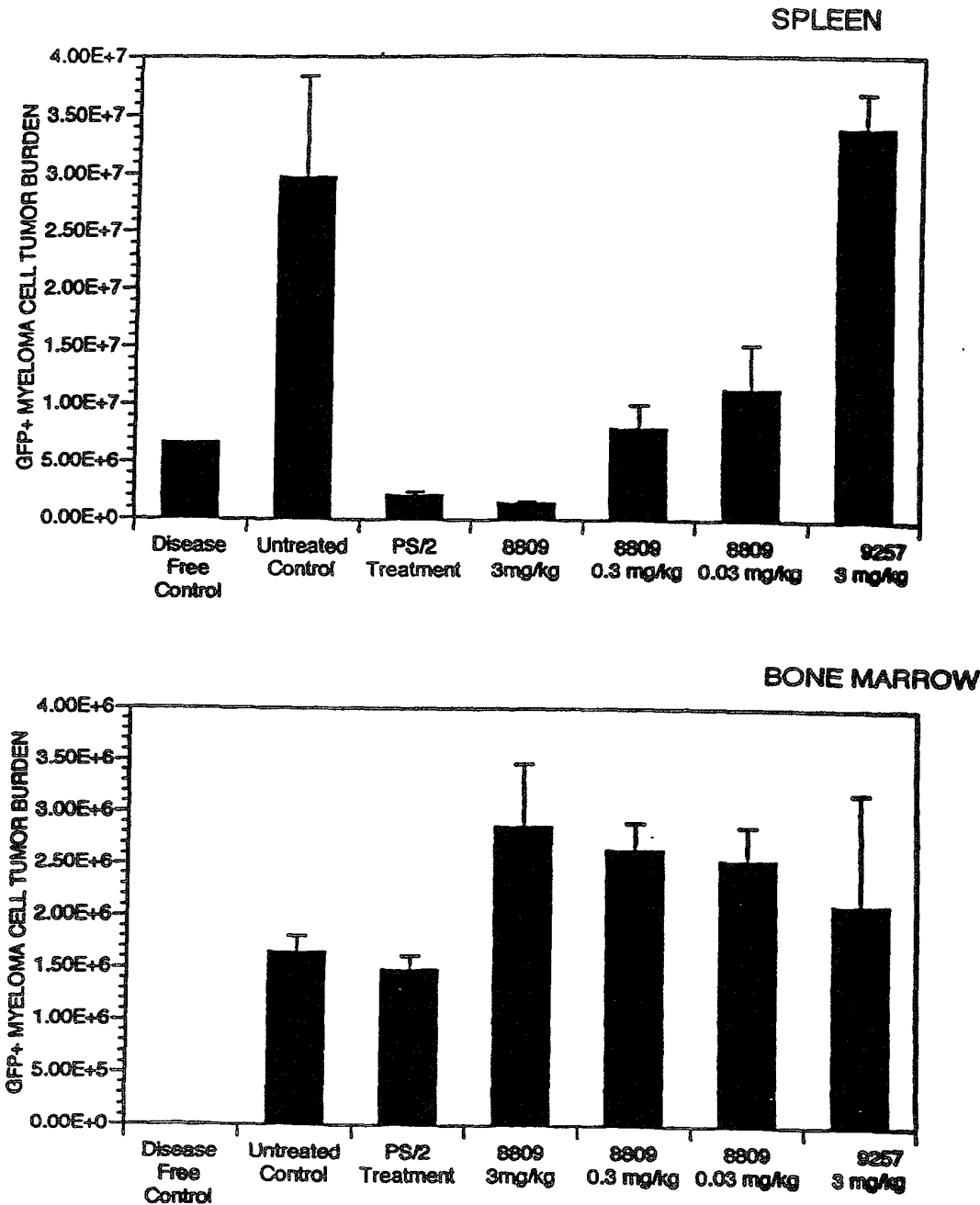


Figure 34

Experimental Protocol

5TGM1 Cells (10^6 /mouse)



| Day | 0 | 1 | 7 | 14 | 21 | 28 |
|-----|---|---|---|----|----|----|
|-----|---|---|---|----|----|----|

Ab/mouse 200 μ g i.p. 80 μ g i.p.

Melphalan/mouse 100 μ g i.p.

Figure 35

Inhibition of Hindleg Paralysis

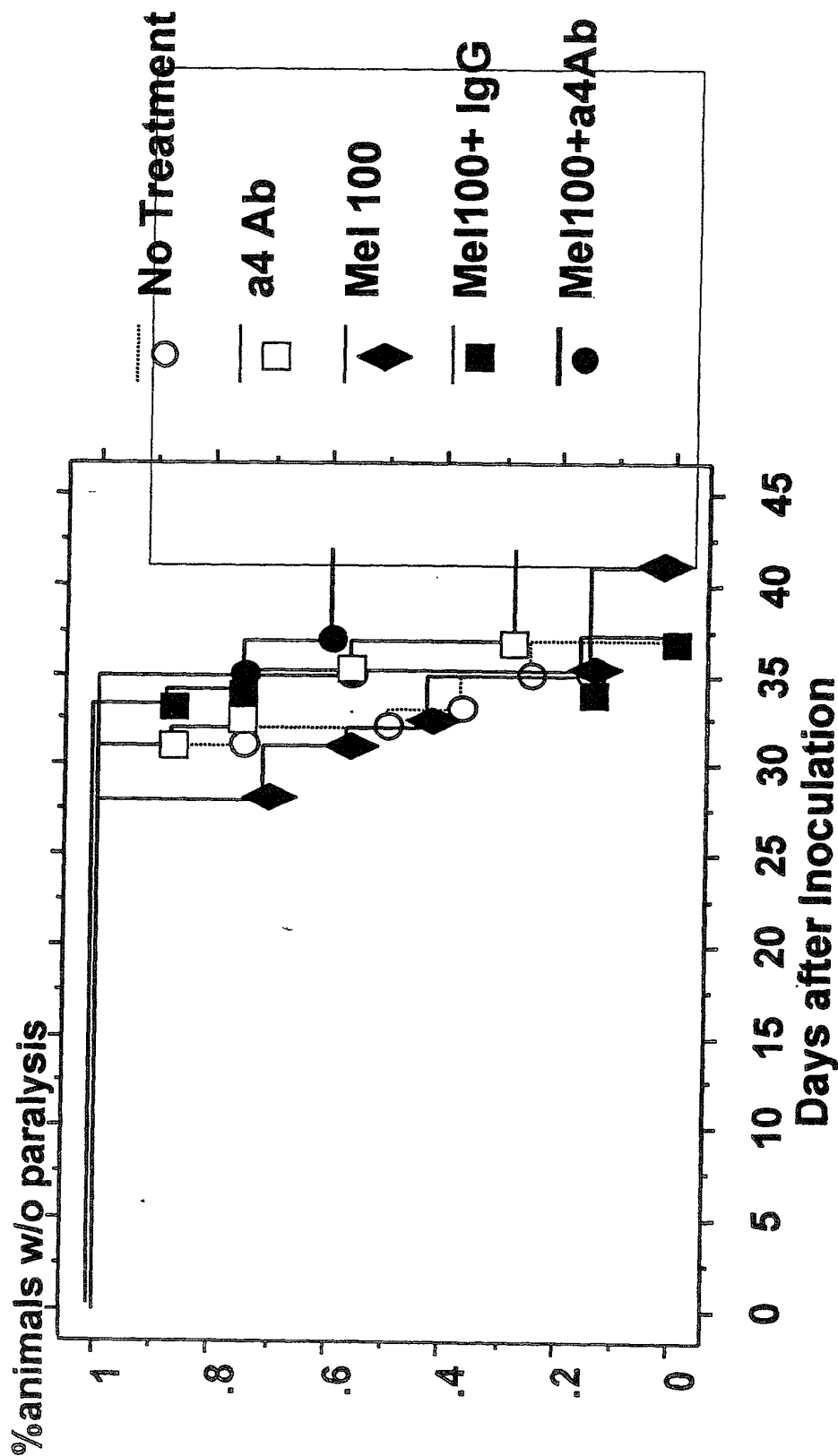


Figure 36